GOVERNMENT OF INDIA
OCEAN DEVELOPMENT
LOK SABHA

STARRED QUESTION NO:510
ANSWERED ON:19.05.2006
DESALINATION OF SEA WATER
Bellarmin Shri A.V.;Deora Shri Milind Murli

Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) the present status of the plant set up for conversion of sea water into potabie water with lesser cost;

(b) the details of technology adoption and experiments made in this regard;

(c) whether the Government has received any proposal for conversion of sea water to drinking water from various States, particularly Tamil Nadu;

(d) if so, the details thereof along with present status thereof;

(e) the allocation of funds made for the purpose; and

(f) the steps taken by the Government for effective implementation of the scheme?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF OCEAN DEVELOPMENT (KAPIL SIBAL)

(a) & (b) National Institute of Ocean Technology (NIOT), Chennai, an autonomous body of the Ministry has indigenously designed, developed and demonstrated the desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination System (LTTD). The LTTD is a process under which the warm surface sea water is flash evaporated at low pressure and the vapour condensed with cold deep sea water. After conducting several experiments in the Laboratory (500 Liter per day capacity & 5000 Liter per day capacity), a LTTD plant with a capacity of 1 lakh liter/day production of fresh water was commissioned in Kavarattt, Lakshadweep in May, 2005. The plant has been working continuously since then and catering to the needs of the population of Kavaratti. This plant was handed over to Lakshadweep Administration in March, 2006 for operation and maintenance. To cater to the needs of large population of coastal cities of India, development of higher capacity plants is underway. Towards this, an LTTD plant with a capacity of one million Liter per day was designed, developed and demonstrated on experimental basis on the barge off Chennai in the first week of May, 2006. The estimated cost of production of fresh water, being operated at Kavaratti, Lakshadweep, is 7-9 paise per litre. It is expected to come down for 1 Million litre per day (MLD) plant to 6 paise per litre.

(c) to (f) No, Sir. This Ministry did not receive any proposal from Tamil Nadu for conversion of seawater to drinking water. However, the Foreign Investment Promotion Board Unit of the Ministry of Finance had referred a proposal to this Ministry for seeking clearance on setting up of 100 MLD desalination plant near Minjur at Chennai, which is a Reverse Osmosis based Technology. This Ministry had examined the proposal from technology and environmental point of view and accorded necessary clearance subject to environmental issues associated with the proposed 100 MLD desalination plant to be ensured during and after installation of the plant.

However, the Ministry did receive the proposals from Lakshadweep Administration to set up two more LTTD plants in other islands, one each at Androtl Island & Kiitan Island of the Lakshadweep. The capacity of LTTD plant to be set up at Androtl Island would be 3 lakh litter per day for which an allocation of Rs. 4.7 crore has been made. Similarly, the capacity of the plant to be set up at Kiitan Island would be1.5 lakh liter per day for which an allocation of Rs.3.9 crore has been earmarked. Actions have been initiated to set up desalination plant in other two islands of the Lakshadweep. These LTTD plants are land based similar to the one commissioned at Kavaratti.